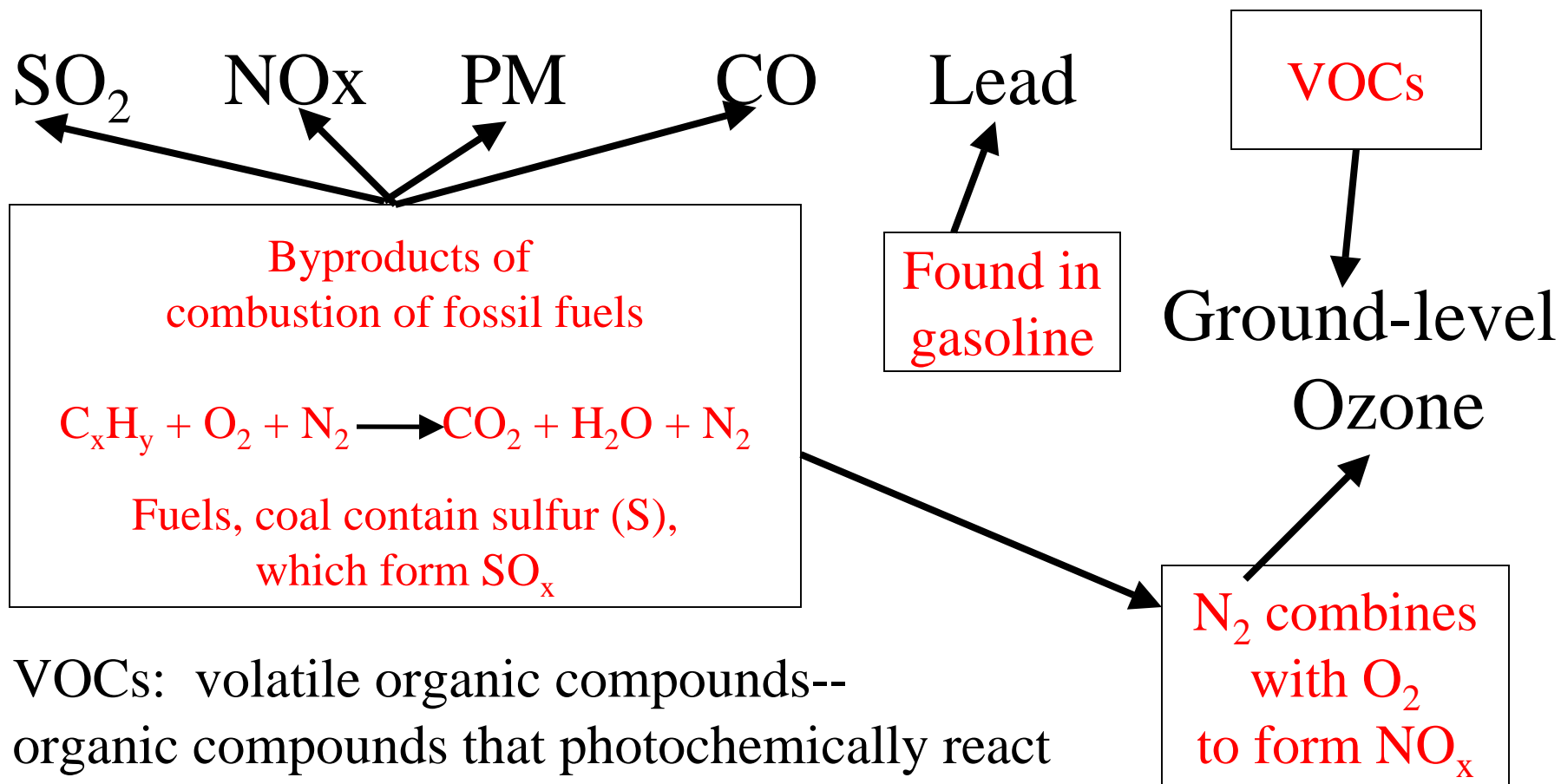


# **Clean Air Act New Source Review (NSR) and Prevention of Significant Deterioration (PSD) Construction Permits**

**Clean Air Program Manager  
USAG Environmental Management**



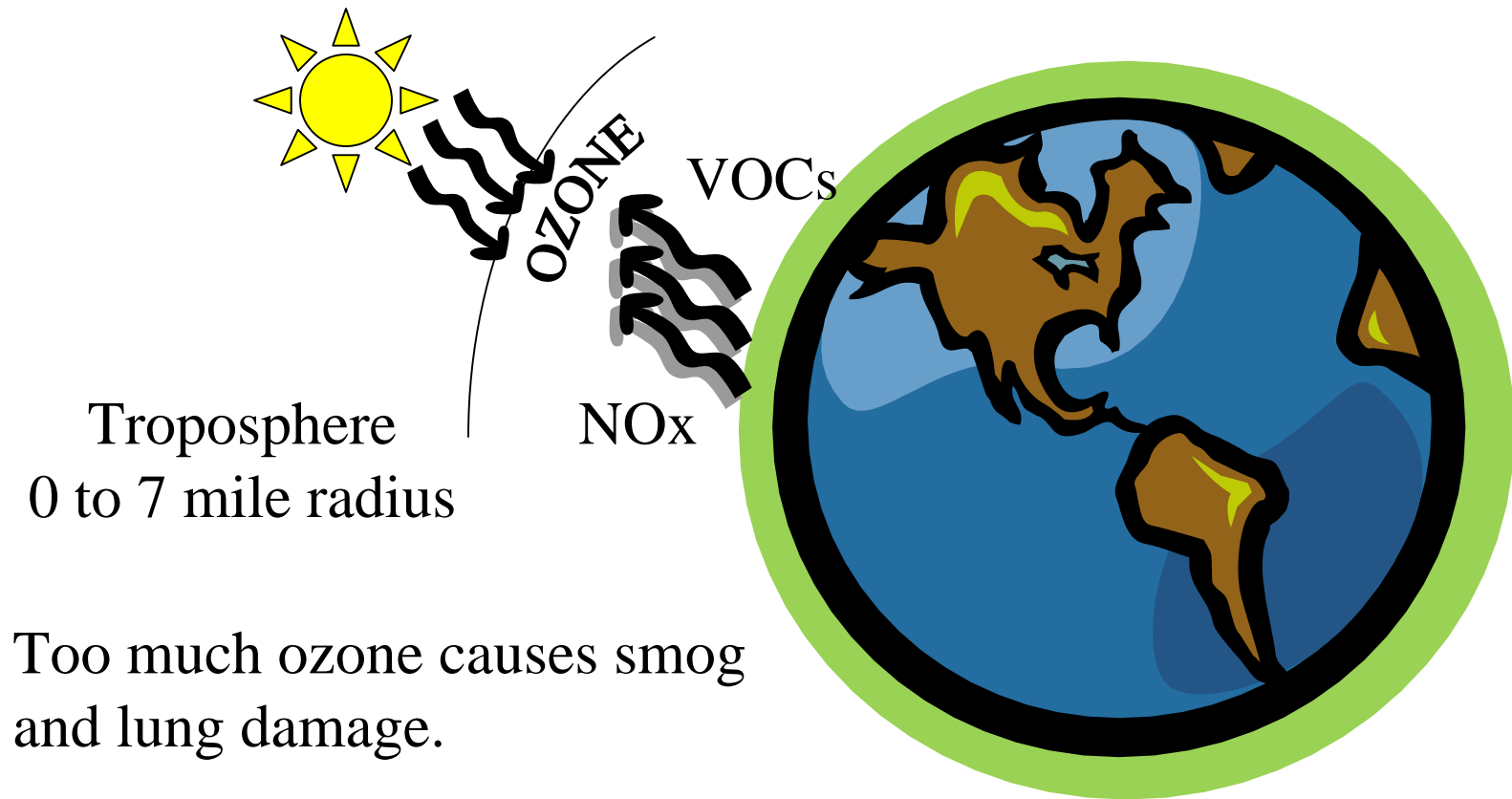
# NAAQS



VOCs: volatile organic compounds--  
organic compounds that photochemically react

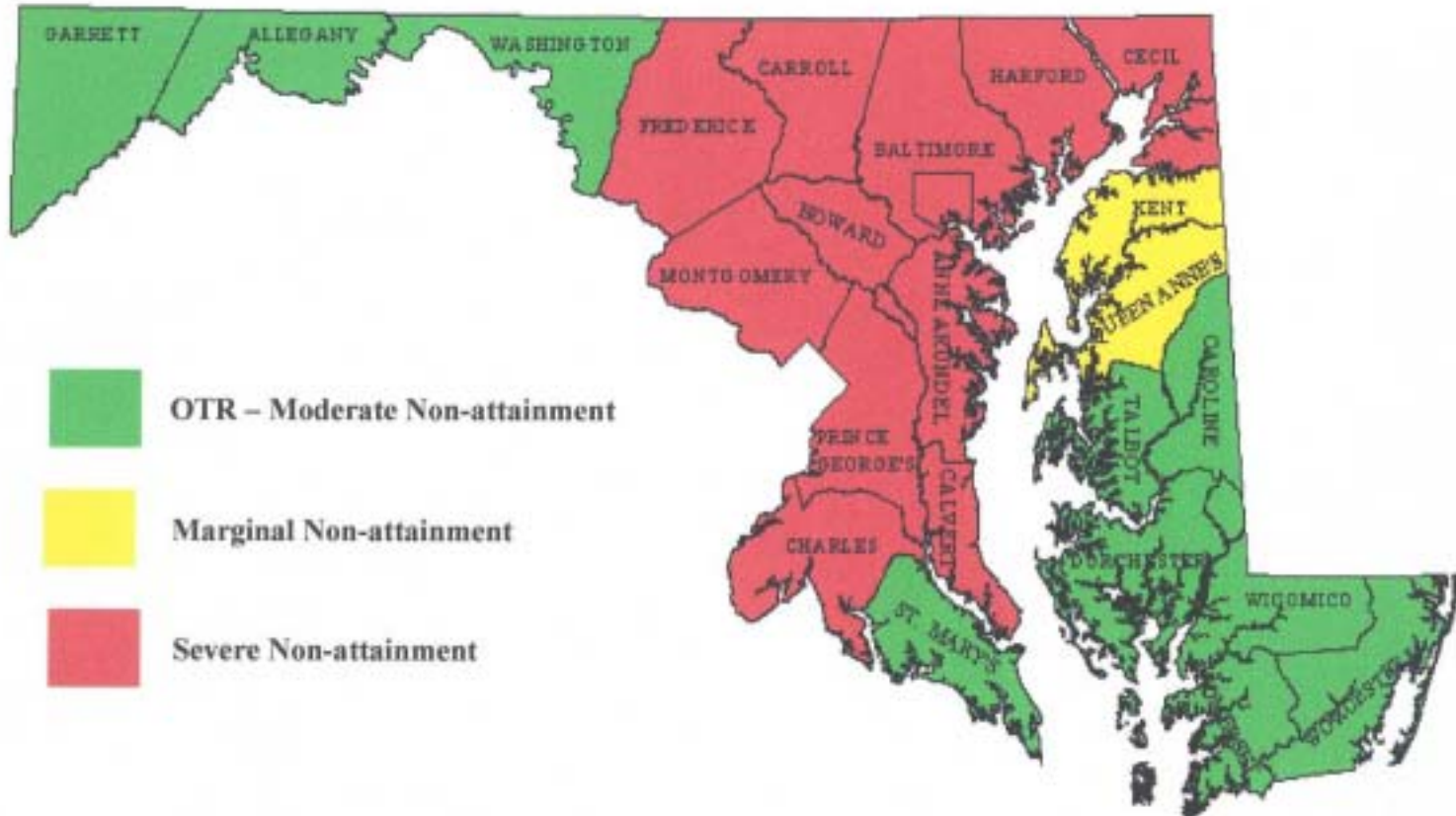


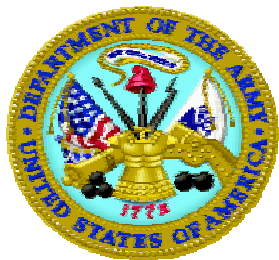
# Ozone





# Severe Ozone Non-attainment Area





# Ozone NAA

## Top Ozone Sources



#2

Automobiles

90 tons/day NO<sub>x</sub>

120 tons/day VOCs



#1

Power Plants

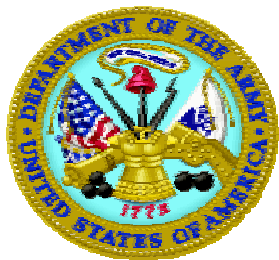
180 tons/day NO<sub>x</sub>



#3

Diesel Trucks

55 tons/day NO<sub>x</sub>



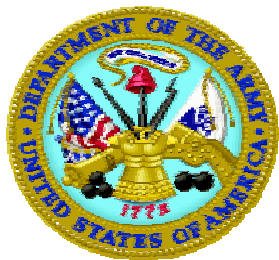
# Fort Detrick's Primary Ozone Sources



Building 190  
boiler plant

Building 393  
incinerator plant



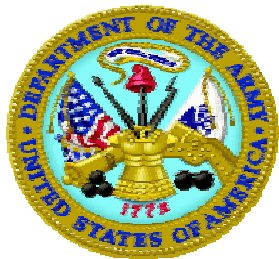


# NAAQS at Detrick



NAAQS	Non-attainment At Detrick	Attainment At Detrick
NO <sub>x</sub>	X (sort of)	X
SO <sub>2</sub>		X
CO		X
PM		X
Lead		X
Ozone	X	
Leads to regulation of NO <sub>x</sub> and VOCs		PSD evaluation
NSR evaluation		





# What is a Major Source?

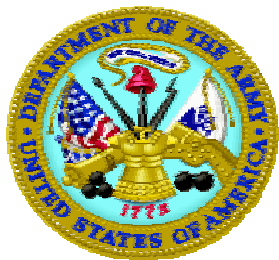


Major:  
defined by many categories  
of large combustion  
equipment

Source:  
facility and/or  
equipment that emits  
NO<sub>x</sub>, SO<sub>2</sub>, CO, VOCs,  
lead, or PM

At Detrick, mostly boilers, large generators,  
incinerators, gasoline dispensing, autoclaves,  
and sterilizers





# NSR and PSD Defined



## New Source Review

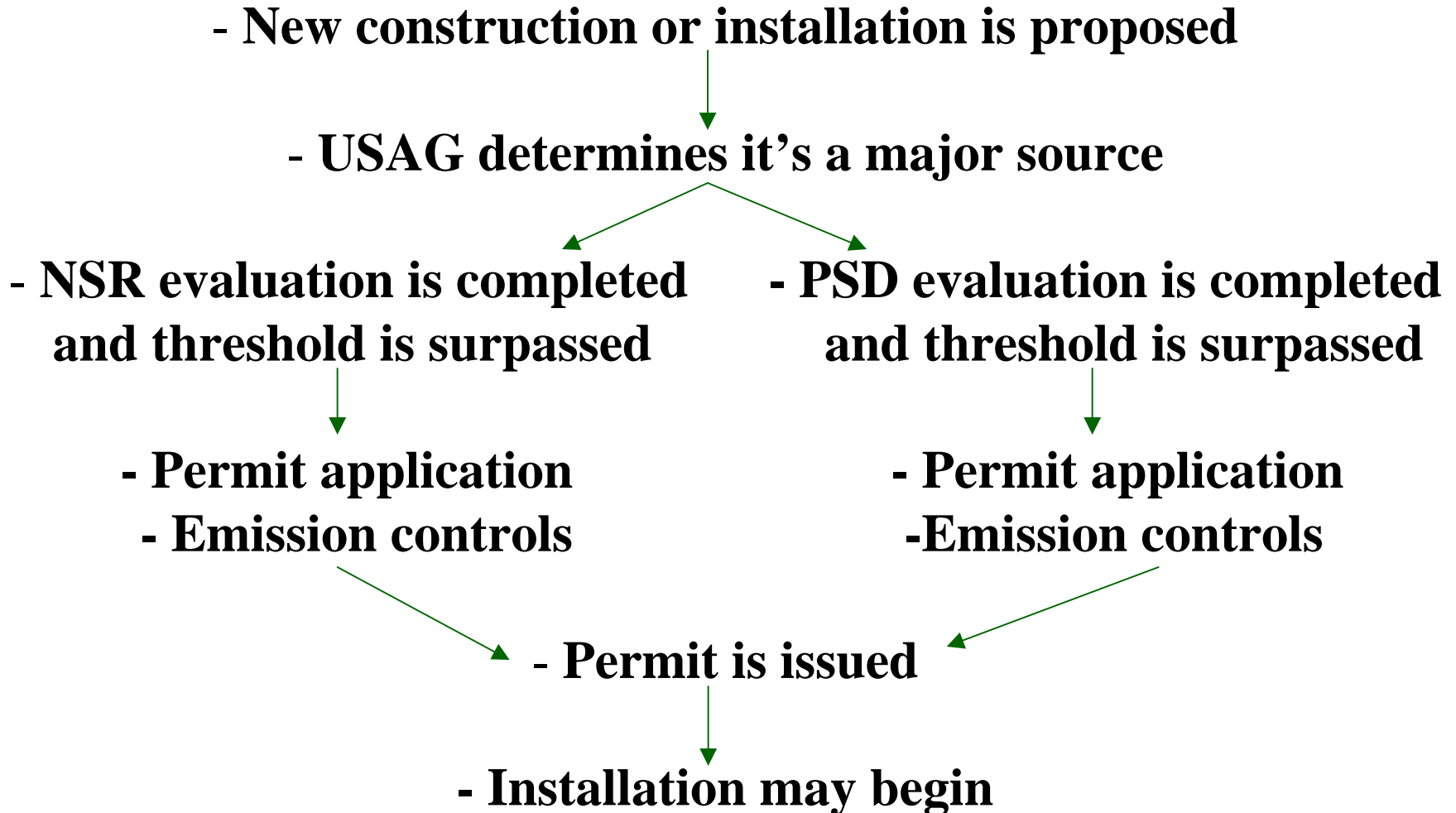
Required for new *major sources*  
and for major modifications of  
*major sources* that cause increases in  
non-attainment pollutants  
(at Detrick, NO<sub>x</sub> and VOCs)  
of certain thresholds  
over the previous 5-year period

## Prevention of Significant Deterioration

Required for new *major sources*  
and for major modifications of  
*major sources* that cause increases in  
attainment pollutants  
(at Detrick, NO<sub>x</sub>, SO<sub>2</sub>, PM, CO, etc.)  
of certain thresholds  
over the previous 5-year period

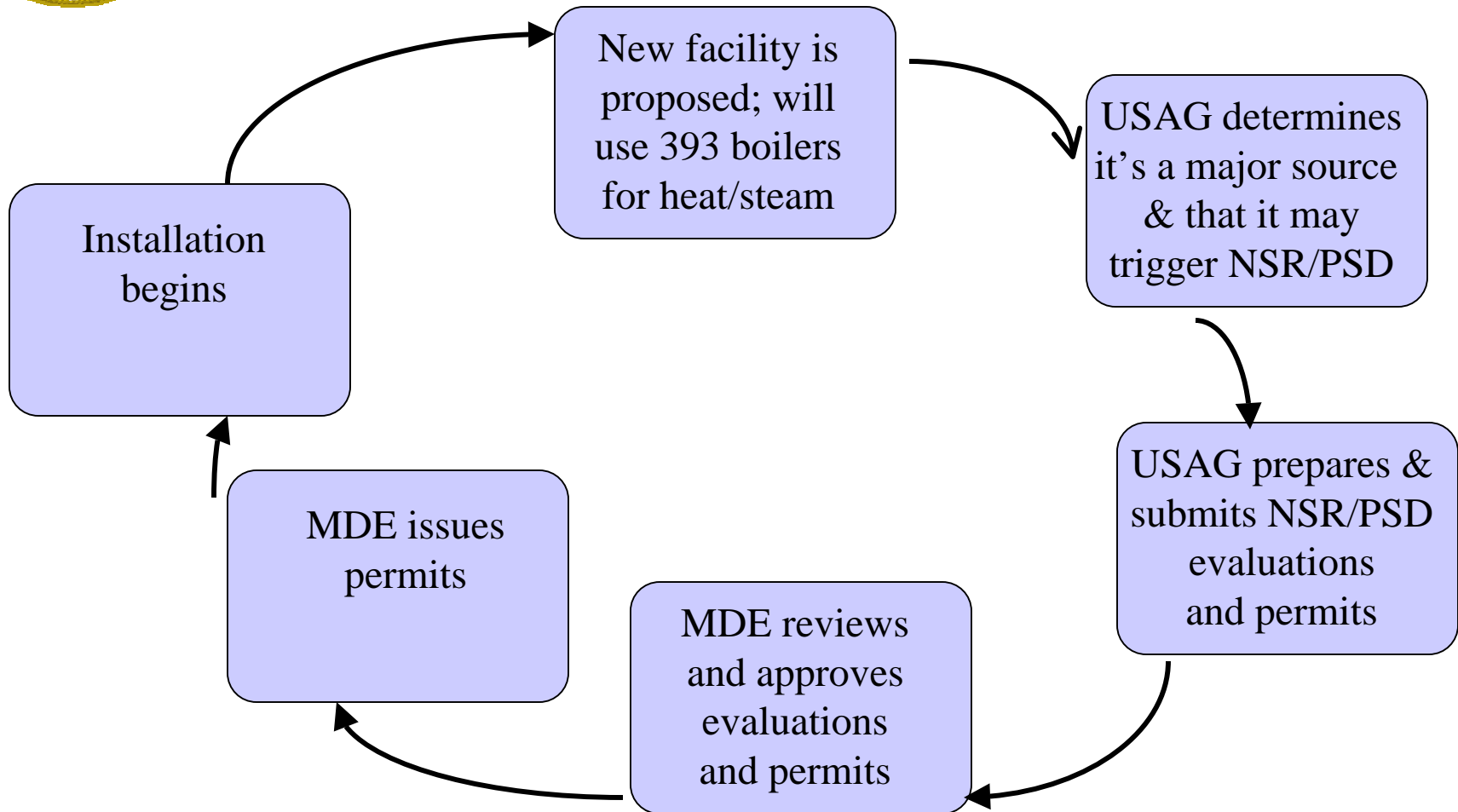


# Sequence of Events





# Example

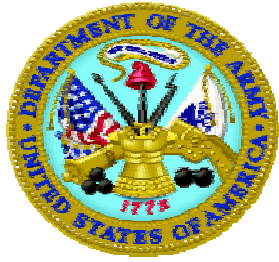




# Issues to Consider



- Time line potentially 2.5 years—notify USAG ASAP
- Expenses potentially in the millions with short notice
- Construction most likely to require NSR/PSD permits: new boilers  $> 1$  MMBtu/hr, connecting to 393 boiler plant
- Includes major modifications
- Permits must be obtained before equipment is on-site
- Who pays for what?



# Clean Air Act NSR/PSD Construction Permits



## Contact Information:

Air Program Manager  
USAG Environmental Management  
Phone 301-619-3906  
Fax 301-619-2555